

THAT WHICH IS CLAIMED:

1. A voltage ramp generator $\left(\frac{\Delta V_c}{\Delta t}\right)$ comprising
a capacitance (C) and a charging circuit for the
capacitance that permits generation of a charging
current for the capacitance (IT5), the charging circuit
for the capacitance comprising a current generator
(Ig2) of resistance Rg2, characterized in that the
charging circuit for the capacitance includes means
(Re, T4, T5) that enable the capacitance charging
current to be proportional to $(Re/Rg2)^2$ where Re is a
resistance.
2. A voltage ramp generator according to
Claim 1, characterized in that the circuit for charging
the capacitance is a degenerate current mirror type
circuit.
3. A voltage ramp generator according to
Claim 2 characterized in that the a degenerate current
mirror type circuit is made up of a first P-type MOS
transistor (T4) comprising a gate, a drain and a source
and a second P-type transistor (T5) comprising a gate,
a drain and a source, the source of the first
transistor (T4) being connected to the first terminal
of the resistance Re, the second terminal of which is
connected to a supply voltage (V+), the drain and the
gate of the first transistor (T4) being connected to a
first terminal of the current generator (Ig2), the
second terminal of which is connected to the ground of
the circuit, the gate, the source and the drain of the
second transistor (T5) being connected respectively to
the gate of the first transistor (T4), to the supply
voltage (V+), and to the first terminal of the
capacitance (C), the second terminal of which is
connected to the ground of a circuit.

4. A voltage ramp generator according to Claim 3, characterized in that the capacitance (C) is a gate capacitance of a MOS transistor.

5. A voltage ramp generator according to any one of Claims 1 to 4, characterized in that the current (I_{g2}) generated by the current generator is written:

5

$$I_{g2} = K_2 \times \frac{V_{g2}}{R_{g2}}$$

where V_{g2} is a reference voltage,

proportional to the quantity $k \frac{T}{q}$, where k is the

10 Boltzmann constant, T is absolute temperature and q is the charge of an electron.

6. A generator of a current ramp $\left(\frac{\Delta I_s}{\Delta t} \right)$

comprising a generator of a voltage ramp $\left(\frac{\Delta V_c}{\Delta t} \right)$ and a circuit that permits the conversion of the voltage ramp into a current ramp, characterized in that the voltage ramp generator is a voltage ramp generator according to any one of Claims 1 to 5.

7. A generator of a current ramp $\left(\frac{\Delta I_s}{\Delta t} \right)$

according to Claim 6, characterized in that the circuit that permits the conversion of the voltage ramp into a current ramp includes a resistance (R_s) that

allows the conversion of the voltage ramp $\left(\frac{\Delta V_c}{\Delta t}\right)$ into a current ramp $\left(\frac{\Delta I_s}{\Delta t}\right)$.

8. A current ramp generator according to Claim 7, characterized in that the resistance (R_s) that

allows the conversion of the voltage ramp $\left(\frac{\Delta V_c}{\Delta t}\right)$ into a current ramp is an implanted resistance having a positive temperature coefficient.

5

add a'